Attorney's Docket: 2003DE133

Amendments to the Claims

- 1. (Currently Amended) An aqueous pigment formulation comprising
- (A) at least one organic and/or pigment, inorganic pigment, or a mixture thereof
- (B) at least one polyethylene glycol alkyl ether functionalized with a terminal acid group,
- (C) at least one alkoxylated styrene-phenol condensate,
- (D) at least one polyethylene glycol ether having an average molar mass between 200 and 1000 g/mol,
- (E) at least one alkynediol,
- (F) fats and oils of vegetable and/or or animal origin, and/or saturated and unsaturated higher fatty acids of the fats and oils of vegetable or animal origin, such fats and oils and/or salts of such the saturated and unsaturated higher fatty acids or a mixture thereof,
- (G) if appropriate optionally, an aqueous acrylate resin solution,
- (H) <u>if appropriate optionally</u>, a polymeric condensation product of aromatic sulfonic acids and formaldehyde, and/or of the salts of aromatic sulfonic acids and formaldehyde <u>or a mixture thereof</u>,
- (I) if appropriate optionally, a sulfosuccinic monoester of a castor oil alkoxylate,
- (J) if appropriate optionally, a hydrotropic substance,
- (K) if appropriate further add materials customary for aqueous pigment formulations, and
- (L) water.
- 2. (Currently Amended) The pigment formulation according to claim 1 comprising essentially
- (A) 5% to 80% by weight of <u>the</u> at least one organic and/or <u>pigment</u> inorganic pigment or mixture thereof,
- (B) 0.1% to 30% by weight of the at least one polyethylene glycol alkyl ether functionalized with a terminal acid group,

- (C) 0.1% to 30% by weight of <u>the</u> at least one alkoxylated styrene-phenol condensate,
- (D) 0.5% to 50% by weight of the at least one polyethylene glycol ether having an average molar mass between 200 and 1000 g/mol,
- (E) 0.1% to 5% by weight of the at least one alkynediol,
- (F) 0.1% to 10% by weight of fats and oils of vegetable and/or animal origin and/or saturated and unsaturated higher fatty acids of such fats and oils and/or salts of such saturated and unsaturated higher fatty acids the fats and oils of vegetable or animal origin, saturated and unsaturated higher fatty acids of the fats and oils of vegetable or animal origin, salts of the saturated and unsaturated higher fatty acids or a mixture thereof,
- (G) 0% to 30% by weight of an the aqueous acrylate resin solution,
- (H) 0% to 10% by weight of a-the polymeric condensation product of aromatic sulfonic acids and formaldehyde, and/or of the salts of aromatic sulfonic acids and formaldehyde or a mixture thereof,
- (I) 0% to 10% by weight of a-the sulfosuccinic monoester of a castor oil alkoxylate,
- (J) 0% to 30% by weight of a the hydrotropic substance,
- _(K) 0% to 10% by weight of further add materials customary for aqueous pigment formulations, and
- (L) 5% to 90% by weight of the water, all based on the total weight of the pigment formulation.
- (Currently Amended) The pigment formulation according to claim 1 or 2 comprising essentially
- (A) 20% to 70% by weight of the at least one organic and/or pigment, inorganic pigment or mixture thereof,
- (B) 1% to 15% by weight of <u>the</u> at least one polyethylene glycol alkyl ether functionalized with a terminal acid group,
- (C) 1% to 15% by weight of the at least one alkoxylated styrene-phenol condensate,

- (D) 1% to 20% by weight of <u>the</u> at least one polyethylene glycol ether having an average molar mass between 200 and 1000 g/mol,
- (E) 0.1% to 2% by weight of the at least one alkynediol,
- (F) 0.1% to 5% by weight of the fats and oils of vegetable or animal origin, saturated and unsaturated higher fatty acids of the fats and oils of vegetable or animal origin, salts of the saturated and unsaturated higher fatty acids or a mixture thereof fats and oils of vegetable and/or animal origin and/or saturated and unsaturated higher fatty acids of such fats and oils and/or salts of such saturated and unsaturated higher fatty acids,
- (G) 0% to 25% by weight of an-the aqueous acrylate resin solution,
- (H) 0% to 5% by weight of a the polymeric condensation product of aromatic sulfonic acids and formaldehyde, and/or of the salts of aromatic sulfonic acids and formaldehyde or a mixture thereof,
- (I) 0% to 8% by weight of <u>a_the_sulfosuccinic monoester of a castor oil</u> ethoxylate,
- (J) 0% to 20% by weight of a the hydrotropic substance,
- _(K) -- 0% to 5% by weight of further add materials customary for aqueous pigment formulations, and
- (L) 10% to 70% by weight of the water, all based on the total weight of the pigment formulation.
- 4. (Currently Amended) The pigment formulation according to one or more of claims 1 to 3 claim 1, wherein said organic pigment component (A) is at least one pigment selected from the group consisting of the monoazo, disazo, laked azo, β-naphthol, Naphthol AS, benzimidazolone, disazo condensation, azo metal complex, phthalocyanine, quinacridone, perylene, perinone, thioindigo, anthanthrone, anthraquinone, flavanthrone, indanthrone, isoviolanthrone, pyranthrone, dioxazine, quinophthalone, isoindoline, isoindolinone or diketopyrrolopyrrole pigments, or an acidic to alkaline carbon black selected from the group consisting of the furnace blacks or and lamp blacks, or a combination and a mixture thereof.

- 5. (Currently Amended) The pigment formulation according to ene or more of claims 1 to 4 claim 1, wherein the component A) is an organic pigment is combined with carbon black or titanium dioxide.
- 6. (Currently Amended) The pigment formulation according to one or more of claims 1 to 5 claim 1, wherein said the polyethylene glycol alkyl ether (B) functionalized with a terminal acid group corresponds to is a compound of the formula (I):

R1-O-
$$\left\{ \begin{array}{c} C - C - O - \left\}_{n} \end{array} \right\}$$
 (I)

where

 R^1 is a substituted or unsubstituted, branched or unbranched C_1 - C_{20} -alkyl or C_3 - C_{20} -cycloalkyl radical or a substituted or unsubstituted, branched or unbranched C_2 - C_{20} -alkenyl or C_3 - C_{20} -cycloalkenyl radical, the substituents being 1, 2, 3 or 4 radicals in-selected from the group consisting of halogen, aryl, aryl(C_1 - C_{20})alkyl, C_5 - C_6 -cycloalkyl, hetaryl, hetaryl(C_1 - C_{20})alkyl and C_1 - C_{20} -alkoxy,

n is a number from 1 to 100,

X is SO_3 , SO_2 , CH_2COO , PO_3^2 or PO_3M , and

M is H, a monovalent metal cation, a divalent metal cation, NH_4^+ , a secondary, tertiary or quaternary ammonium ion, or a combination thereof.

7. (Currently Amended) The pigment formulation according to ene or more of claims 1 to 6 claim 1, wherein said the alkoxylated styrene-phenol condensate (C) corresponds to is a compound of the formula (II) or (III) or a mixture thereof:

R2
$$R3$$

$$R3$$

$$R3$$

$$R4$$

$$R3$$

$$R3$$

$$R3$$

$$R3$$

$$R4$$

$$R3$$

$$R3$$

where

R² is H, a branched or unbranched C_1 - C_{20} -alkyl or C_3 - C_{20} -cycloalkyl radical, erabranched or unbranched C_2 - C_{20} -alkenyl or C_3 - C_{20} -cycloalkenyl radical, R³ and R⁴ are independently H, a branched or unbranched C_1 - C_{20} -alkyl or C_3 - C_{20} -cycloalkyl radical, erabranched or unbranched C_2 - C_{20} -alkenyl or C_3 - C_{20} -cycloalkenyl radical,

n is a number from 1 to 100,

X is CO-R⁵-COO, SO₃, SO₂, PO₃² or PO₃M,

 R^5 is a substituted or unsubstituted, branched or unbranched C_1 - C_{20} -alkylene radical, a substituted or unsubstituted, branched or unbranched C_2 - C_{20} -alkenylene radical, or a substituted or unsubstituted arylene radical, the substituents preferably being 1, 2, 3 or 4 radicals from the group consisting of halogen, hydroxyl, C_4 - C_4 -alkoxy, nitro, cyano, carboxyl, amino and sulfo, and

M is H, a monovalent metal cation, a divalent metal cation, NH_4^+ , a secondary, tertiary or quaternary ammonium ion.

8. (Currently Amended) The pigment formulation according to one or more of claims 1 to 7 claim 1, wherein said the alkynediol (E) corresponds to is a compound of the formula (IV) or (V) or a mixture thereof:

$$\begin{array}{c|cccc}
OH & OH \\
R6 & & R7
\end{array}$$
R6 (IV)

where

 R^6 is H or a branched or unbranched C_1 - C_4 -alkyl radical or a branched or unbranched C_2 - C_4 -alkenyl radical,

 R^7 is a branched or unbranched C_3 - C_{20} -alkyl or C_3 - C_{20} -cycloalkyl radical or a branched or unbranched C_3 - C_{20} -alkenyl or C_3 - C_{20} -cycloalkenyl radical,

 R^8 is H, a branched or unbranched C_1 - C_{20} -alkyl or C_3 - C_{20} -cycloalkyl radical or a branched or unbranched C_2 - C_{20} -alkenyl or C_3 - C_{20} -cycloalkenyl radical,

- n is a number from 1 to 100.
- 9. (Currently Amended) The pigment formulation according to one or more of claims 1 to 8 claim 1, wherein said the component (F) corresponds to is a compound of the formula (VI) or a mixture thereof:

where

- R⁹ is a branched or unbranched C_7 - C_{29} -alkyl, or a branched or unbranched C_7 - C_{29} -alkenyl radical, a branched or unbranched C_7 - C_{29} -alkdienyl radical, or a branched or unbranched C_7 - C_{29} -alktrienyl radical, and
- M is H, a monovalent metal cation, NH₄⁺, a secondary, tertiary or quaternary ammonium ion,
- or a fat or oil <u>selected</u> from the group consisting of tallow, palm kernel fat, coco fat, rapeseed oil, sunflower oil, linseed oil, palm oil, soya oil, peanut oil and whale oil.
- 10. (Currently Amended) A process for producing a pigment formulation according to one or more of claims 1 to 9, which comprises claim 1, comprising the steps of incipiently pasting and homogenizing in water the said-component (A) together with said components (B), (C), (D), (E), (F) and if appropriate optionally (G), (H), (I), (J) and (K) being incipiently pasted and homogenized in water (component L) to form a mixture and finely dispersed dispersing or finely dissipated dissipating the mixture with the aid of a grinding or dispersing assembly.
- 11. (Currently Amended) The use of a pigment formulation according to one or more of claims 1 to 9 for pigmenting A pigmented natural or synthetic materials material pigmented with the pigment formulation according to claim 1.
- 12. (Currently Amended) The use according to claim 11 for pigmenting A pigmented natural and or synthetic fiber materials material pigmented with the

pigment formulation according to claim 1, preferably cellulose fibers, especially for paper pulp coloration and laminate coloration.

- 13. (Currently Amended) The use according to claim 11 for pigmentation A pigmentation composition or pigmented article comprising a pigment formulation according to claim 1, wherein the pigmentation composition or pigmented article is in the form or production of waterborne printing inks, ink jet inks, electrophotographic toners, powder coatings, color filters, electronic inks, electronic paper and "electronic paper", painting and emulsion colors, emulsion paintings, solventborne printing inks, wallpaper colors, water-thinnable paintings, wood preservation systems, viscose dope dyeing, sausage casings, seed, fertilizers, glass bottles, and also for mass ecloration of roof shingles, for coloring renders, woodstains, colored pencil leads, felttip pens, waxes, paraffins, graphics inks, ballpoint pen pastes, chalks, washing compositions, and cleaning compositions, shoe care agents, latex products, abrasives and also for coloring or colored plastics.
- 14. (New) The pigment formulation according to claim 6, wherein the substituents for R^5 are 1, 2, 3 or 4 radicals selected from the group consisting of halogen, hydroxyl, C_1 - C_4 -alkoxy, nitro, cyano, carboxyl, amino and sulfo.
- 15. (New) The pigmented natural or synthetic fiber material according to claim 13, wherein the pigmented natural or synthetic fiber material is cellulose fibers.
- 16. (New) The pigmented natural or synthetic fiber material according to claim 15, wherein the cellulosic fibers are for paper pulp coloration or laminate coloration.